

California Regional Water Quality Control Board
Santa Ana Region

ORDER NO. R8-2004-0033

NPDES No. CA 0111007

Waste Discharge Requirements
for the
United States Air Force
March Air Reserve Base
Storm Water Runoff
Riverside County, California

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board) finds that:

1. On October 7, 2003, the United States Air Force, March Air Reserve Base (MARB), (hereinafter discharger) submitted a Report of Waste Discharge (ROWD) for NPDES permit renewal for the discharge of storm water from its facility. Additional information to complete the application was submitted on March 12, 2004. Discharges from the facility are currently regulated under Order No. 99-6, NPDES No. CA 0111007, which expired on April 1, 2004. Order No. 99-6 was administratively extended on March 30, 2004.
2. The facility was realigned from an active duty Air Force Base to a reserve base on April 1, 1996. There are a number of tenants carrying out activities at MARB. These tenants include, but are not limited to, the 452nd Air Mobility Wing (AMW), The California Air National Guard Air Refueling Wing and an alert unit, the Combat Communications Squadron, the Army Reserve and the U.S. Customs Service. The 452nd AMW is headquartered at MARB. The duties of the 452nd AMW are to maintain the capability to conduct air-refueling operations, to transport materials and troops, to provide training in support of aviation activities and other mission objectives of the Department of Defense. The duties of the California Air National Guard are similar to those of the 452nd AMW with an additional duty to provide assistance to the State of California by responding to state emergencies upon the Governor's request. The Combat Communications Squadron provides communication capabilities to deployed military forces. The 63rd Army Reserve Command maintains combat-ready operational capabilities in the areas of fuel supply and distribution, vehicle and equipment maintenance services, ground medical evacuation, and postal services. The U.S. Customs Service provides aerial and ground traffic surveillance, interdiction of aircraft engaged in smuggling and assistance to other law enforcement agencies upon request.
3. The discharger currently operates and maintains approximately 60 aircrafts at the facility. The aircraft, vehicle, and facility maintenance operations require the on-site

storage and use of fuels (jet fuel, gasoline, diesel), solvents, oils and other hazardous materials. These operations generate approximately an average of 290,0000 pounds per year of hazardous wastes that are stored at the site prior to proper disposal.

4. The facility is included in the National Priority List (Superfund List) because of problems resulting from past waste disposal practices at the site. A number of contaminated areas within the site are currently undergoing cleanup.
5. The facility is located in Moreno Valley adjacent to the Escondido Freeway (Interstate 215) in Riverside County (Sections 12-15, 22-26, T3S, R4W, and Sections 18, 19, and 30, T3S, R3W, SBB&M). The location of the facility is shown on Attachment "A", which is hereby made a part of this order. The facility occupies approximately 2,300 acres (the cantonment area). Areas that were formerly part of the Air Force Base and are outside the cantonment area are now under the jurisdiction of the Air Force Real Property Agency and the March Joint Powers Authority.
6. Order No. 99-6, NPDES No. CA 0111007, was issued to the discharger for the discharge of storm-induced runoff from the facility. Order No. 99-6 regulated three discharge points: Discharge Serials No. 001, 002 and 003. The base realignment changed the base boundaries; consequently, this Order includes a redefinition of Discharge Serials No. 001, 002 and 003, and an additional discharge point Discharge Serial No. 004 (see Finding 7, below).
7. Storm water runoff from the cantonment area includes drainage from maintenance hangers, fuel distribution facilities, the runway, taxiway, and aircraft parking apron surfaces where aircraft use, fueling, and maintenance activities occur, and the vegetated areas adjacent to paved aircraft usage areas. There are four major storm water discharge points from the Base, as indicated on Attachment "A" of the order and described below. These discharge points were selected from others to provide adequate representation of the storm water runoff from the base drainage with emphasis on industrial areas and airport facilities. The map in Attachment "A" shows the locations of the four discharge points.

Discharge Serial No. 001: The tributary area to Discharge Serial No. 001 includes runoff from the former base housing area (known as Arnold Heights) west of the Escondido Freeway (Interstate 215) and north of Van Buren Boulevard and portions of the right-of-way of Interstate 215. Runoff is conveyed to the east side of the Base via a system of storm drain pipes and open channels to discharge to the Perris Valley Storm Drain. A large open basin functioning as an oil/water separator is located adjacent to the open channel just upstream of the discharge point to the Perris Valley Storm Drain. Under low flow conditions, a low weir in the open channel diverts flow to the oil/water separator. A floating skimmer collects and pumps floating oil

and grease into a holding tank for storage and proper disposal. Under high flow conditions, storm water flows over the weir and directly into the Perris Valley Storm Drain that is tributary to the San Jacinto River, Reach 3. In addition to Storm Water runoff, Discharge Serial No. 001 also receives point source discharge from water rinsate of aboveground piping and appurtenances associated with periodic preventive maintenance and inspection activities at fuel distribution facility 1270, and from testing and/or accidental activation of the fire suppression system at hangar 2303. These discharges typically do not reach Discharge Serial No. 001. This Order provides requirements for implementation of an effective BMP¹ for proper control of non-storm water discharges. Discharge Serial No. 001 is located at latitude 33°52'59"N, longitude 117°14'40"W.

Discharge Serial No. 002: Discharges to Discharge Serial No. 002 originate from the balance of the aircraft parking apron not tributary to Discharge Serial No. 001, including the maintenance hangars adjacent to Graeber Street and bounded by the Base Operations Tower. Storm water is ultimately conveyed eastward via a system of pipes and open channels that join Heacock Channel in the vicinity of 8th Street. Heacock Channel is tributary to the Perris Valley Storm Drain that in turn is tributary to the San Jacinto River, Reach 3. Discharge Serial No. 002 is located at latitude 33°53'34"N, longitude 117°15'09"W.

Discharge Serial No. 003: Discharges to Discharge Serial No. 003 originate from the runway and taxiways, and the vegetated areas adjacent to the runway and taxiways. Runoff is conveyed, generally, by shallow swale, open channel or pipe culvert to the southeasterly corner of the Base, where it discharges to the Heacock ditch paralleling Heacock Avenue and eventually intersecting the Oleander Avenue Channel. The Oleander Avenue Channel is tributary to the Perris Valley Storm Drain that is tributary to the San Jacinto River, Reach 3. This discharge point is located at latitude 33°51'45"N, longitude 117°14'38"W.

Discharge Serial No. 004: Storm water runoff tributary to Discharge Serial No. 004 originates from maintenance facilities, visitor lodging quarters, and administrative offices west of Travis Avenue and north of Graeber Street and Meyer Drive. Runoff is conveyed generally by pipe culvert to the open channel paralleling Meyer Drive. The open channel is tributary to the Heacock Channel that is tributary to the Perris Valley Storm Drain that in turn is tributary to the San Jacinto River, Reach 3. Discharge Serial No. 004 is located at latitude 33°54'10" N, longitude 117°15'24" W.

8. A Water Quality Control Plan (Basin Plan) became effective on January 24, 1995. The Basin Plan contains beneficial uses and water quality objectives for waters in the Santa Ana Region.

¹ BMP is defined as best management practice.

9. The requirements contained in this order are necessary to implement the Water Quality Control Plan.
10. Discharge Serials No. 001, 002, 003 and 004 overlie the Perris-North Groundwater Subbasin, the beneficial uses of which include:
 - a. Municipal and domestic supply,
 - b. Agricultural supply,
 - c. Industrial process supply, and
 - d. Industrial service supply.
11. Discharges to the Perris Valley Storm Drain can also affect the Perris-South I and Perris-South II Groundwater Subbasins, the beneficial uses of which include:
 - a. municipal and domestic supply, and
 - b. agricultural supply.
12. Discharges from this facility are tributary to the San Jacinto River, Reach 3, the intermittent beneficial uses of which include:
 - a. Agricultural supply,
 - b. Groundwater recharge,
 - c. Warm freshwater habitat,
 - d. Water contact recreation,
 - e. Non-contact water recreation, and
 - f. Wildlife habitat.
13. The San Jacinto River, Reach 3 is tributary to the San Jacinto River, Reach 2 (Canyon Lake) which has beneficial uses including:
 - a. Municipal and domestic supply,
 - b. Agricultural supply,
 - c. Groundwater recharge,
 - d. Water contact recreation,
 - e. Non-contact water recreation,
 - f. Warm freshwater habitat, and
 - g. Wildlife habitat.
14. Discharges from this facility drain to Canyon Lake which overflows to Lake Elsinore, both of which are 303d listed, impaired waterbodies (listed for several pollutants). Total Maximum Daily Load (TMDL) requirements will be developed for these waterbodies.
15. The discharger will be required to comply with future water quality standards or discharge requirements, which may be imposed by the USEPA or State of California prior to the expiration of this Order. This

Order may be reopened to include TMDLs and/or other requirements developed and adopted by the Regional Board.

16. This order implements Section 402(p) of the Clean Water Act for storm water discharges in accordance with the final rules published by EPA on November 16, 1990 (40 CFR Parts 122, 123 and 124).
17. The project involves the continued operation of an existing facility and, as such, is exempt from the California Environmental Quality Act (Public Resources Code, Section 21100 et seq.) in accordance with Section 15301, Chapter 3, Title 14, California Code of Regulations.
18. Effluent limitations and new source performance standards established pursuant to the Clean Water Act and amendments thereto are applicable to this discharge.
19. The Regional Board has considered antidegradation pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16 and finds that this discharge is consistent with those provisions.
20. The Regional Board has notified the discharger and other interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.
21. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE SPECIFICATIONS

1. The discharge of wastes at Discharge Serials No. 001, 002, 003 and 004 containing constituent concentrations in excess of the following limits is prohibited:

Constituents	Maximum Daily Concentration Limit ² (mg/l)
Total Suspended Solids	75
Oil and Grease	15
Methylene Blue Active Substances	0.5

² The "maximum daily" concentration is defined as the measurement made on any single grab sample or composite sample.

2. The pH of the discharge shall be at all times within the range of 6.5 and 8.5 pH units.
3. The discharge shall not contain hazardous substances equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.

B. RECEIVING WATER LIMITATIONS

1. The discharge shall not result in acute toxicity in ambient receiving waters. The effluent shall be deemed to cause acute toxicity when the toxicity test of 100% effluent as required in Monitoring and Reporting Program No. R8-2004-0033, results in failure of the test as determined using the pass or fail test protocol specified in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA-821-R-02-012, Fifth Edition, October 2002).
2. The discharge shall not result in coloration of the receiving water which causes a nuisance or adversely affects beneficial uses.
3. The discharge shall not cause the deposition of objectionable bottom deposits along the banks or the bottom of the stream channel.
4. The discharge shall not cause visible oil, grease, scum, floating or suspended material or foam in the receiving water.
5. The discharge shall not cause the receiving water to have an objectionable odor.
6. The discharge shall not cause the concentration of toxic pollutants in the water column sediments, or biota to adversely affect beneficial uses of the receiving water.
7. The discharge shall not result in degradation of inland surface water communities and populations, including vertebrate, invertebrate and plant species.
8. The natural taste and odor of fish, shellfish, or other inland surface water resources used for human consumption shall not be impaired as a result of the discharge.
9. Storm water discharges from the Base to any surface or groundwaters shall not adversely impact human health or the environment. Storm water discharges and authorized non-storm

water discharges³ shall not cause or contribute to an exceedance of any applicable water quality standards contained in a Statewide Water Quality Control Plan or the Regional Board's Basin (see also Provision C.19).

C. PROVISIONS

1. This Order shall become effective upon its adoption. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the CWA, or amendments thereto. The NPDES permit shall become effective 10 days after the date of adoption provided the Regional Administrator of the EPA has no objection. If the Regional Administrator objects to its issuance, this Order shall not serve as an NPDES permit until such objection is withdrawn.
2. Storm water and authorized non-storm water discharges from the facility shall not cause or threaten to cause pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code.
3. This Order expires on August 1, 2009, and the discharger must file a report of waste discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.
4. All applications, reports, or information submitted to the Regional Board shall be signed and certified in accordance with 40 CFR Part 122.22.
5. Order No. 99-6 is hereby rescinded.
6. The discharger shall comply with Monitoring and Reporting Program No. R8-2004-0033, as ordered by the Executive Officer. This monitoring and reporting program may be modified by the Executive Officer at any time during the term of this Order, and may include an increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected. Any increase in the number of parameters to be monitored, the frequency of the monitoring or the number and size of samples to be collected may be reduced based on compliance record.

³ Examples of authorized non-storm water discharges are runoff from ornamental irrigation, air conditioning condensate, etc. However, offsite runoff from ornamental irrigation shall not contain total chlorine concentration at or above 1 mg/l. See 40 CFR Part 122.26(d)(2)(iv)(B)(1) for a complete list.

7. The discharger must reduce or prevent the discharge of pollutants associated with the operation of the base in storm water discharges and authorized non-storm water discharges⁴ through implementation of best available technology economically achievable (BAT) for toxic and non-conventional pollutants and best available pollution control technology (BCT) for conventional pollutants. Development and implementation of a storm water pollution prevention plan (SWPPP) that complies with the requirements in Attachment "B" of this Order and includes best management practices (BMP) that achieve BAT/BCT constitutes compliance with this requirement.
8. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.
9. The discharger shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any limitation specified in this Order, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.
10. The discharger shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.
11. Within twelve months from the date of adoption of this Order, the discharger must review the SWPPP for the facility and update any items in need of improvement. The update shall at a minimum include pertinent sections of Attachment "B", Storm Water Pollution Prevention Plan, which is hereby made a part of this Order.
12. All storm water discharges from the facility must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other courses under their jurisdiction.
13. The discharge of wastes to property not owned or controlled by the discharger, except as covered in this Order, is prohibited.
14. In the event of any change in control or ownership of land or waste discharge facilities currently controlled or owned by the discharger, the discharger shall notify the succeeding operator or owner of the

See footnote 3.

existence of this Order by letter, a copy of which shall be forwarded to this Regional Board.

15. This Order is not transferable to any person except after notice to and approval by the Regional Board. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and to incorporate such other requirements as may be necessary under the Clean Water Act.
16. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for modification, revocation and reissuance, or termination of this Order or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
17. This Order may be modified prior to the expiration date to include effluent limitations for pollutants determined to be present in significant amounts in the discharge or to incorporate requirements as may be necessary under the TMDL process.
18. If the Regional Board determines that a discharge may be causing or contributing to an exceedance of any applicable water quality standards contained in a Statewide Water Quality Control Plan or the Regional Board Basin Plan, the Regional Board may order the discharger to comply with requirements described in Receiving Water Limitations. The discharger shall comply with the requirements within the time schedule accepted by the Executive Officer.
19. When conditions warrant, as described in Provision C.18, the discharger will not be in violation of Receiving Water Limitations as long as the discharger has implemented BMPs that achieve BAT/BCT and the following procedure is followed:
 - a. The discharger shall submit a report to the Executive Officer of the Regional Board that describes the BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report shall include an implementation schedule. The Executive Officer may require modifications to the report.
 - b. Following approval of the report described above by the Executive Officer, the discharger shall revise its SWPPP and monitoring program to incorporate the additional BMPs that have been and will be implemented, the implementation schedule and any additional monitoring required.

20. The Regional Board, U.S.E.P.A., and other authorized representatives shall be allowed:
- a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Access to copy any records that are kept under the conditions of this Order;
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - d. To photograph, sample and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the Clean Water Act.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on August 13, 2004.

Gerard J. Thibeault
Executive Officer